MIL-A-9094/2A
10 October 1974
SUPERSEDING
MIL-A-9094/2
23 October 1973

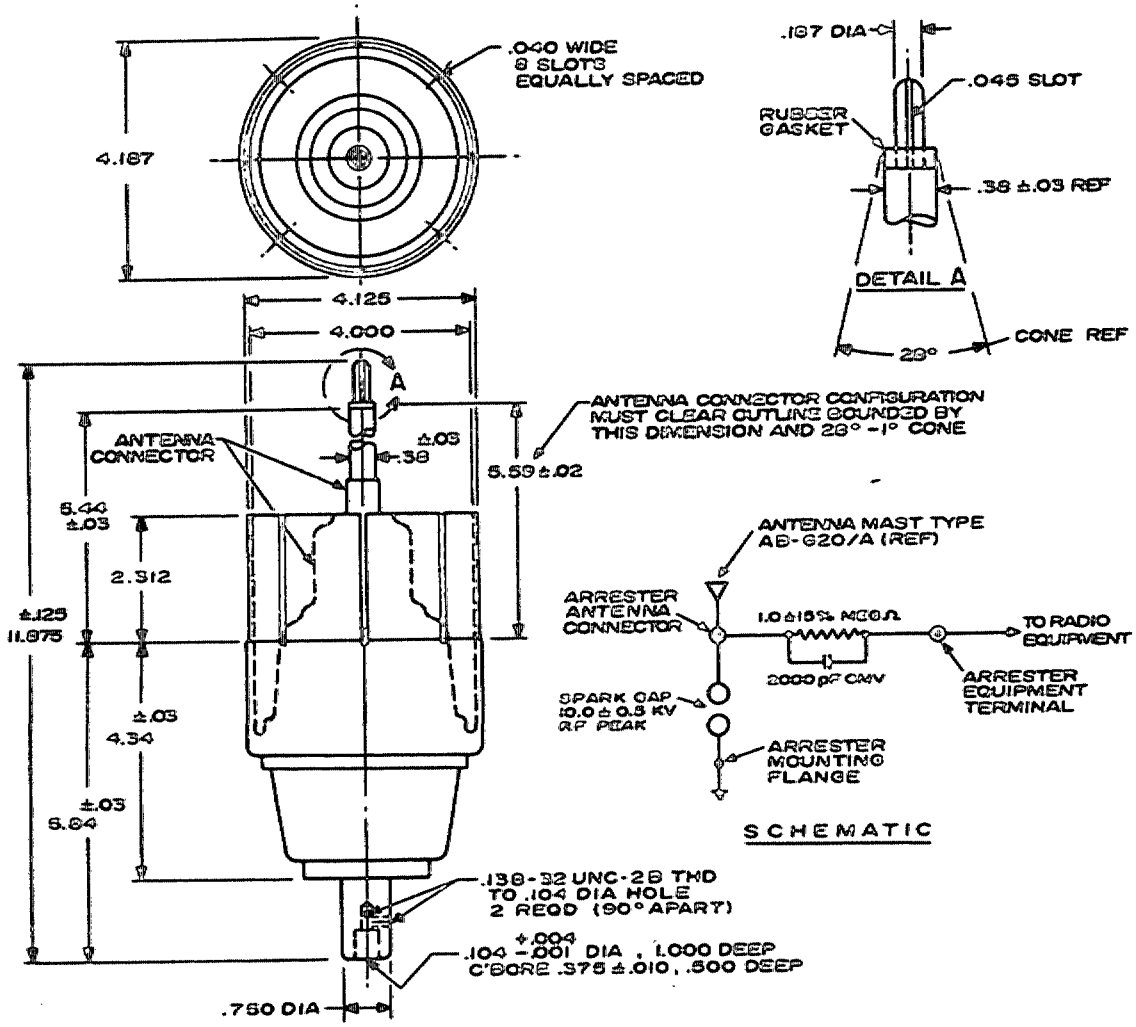
MILITARY SPECIFICATION SHEET

ARRESTER, LIGHTNING (AIRCRAFT)

This specification is approved for use by all Departments and Agencies of the Department of Defense.

(A)

The complete requirements for procuring the Lightning Arrester described herein shall consist of this document and MIL-A-9094C, 3 September 1958.



NOTES:

1. Dimensions are in inches. Unless otherwise specified, tolerance ± .015
2. Caution: Not to be used for solid state circuit protection. The equipment connected to this arrester must have a DC path to ground.

(A) Denotes changes

FSC 5920

REQUIREMENTS:

Design and Construction:

Design, construction, and performance shall be compatible for use with antenna mast Type AB620A covered by Air Force Drawing 60D93026 (see figure).

Maximum Weight - 4 1/2 pounds.

Connectors - The arrester equipment connector shall be compatible for use with and provide positive locking means for the antenna mast equipment cable plug as shown in Detail A of figure.

Lightning Stroke Indication - Not required.

Altitude Range - 0 - 30,000 ft.

Temperature Operating Range - -55° C to 71° C.

Mounting Attitude - Vertical.

Electrical:

Spark Gap Breakdown Voltage - 10.0 ± 0.5 KV RF peak at 2MHz.

Series Capacitor Value - 2000 pF G.M.V., 26 kV dc test.

Bleeder Resistor - 1.0 megohm ± 15%.

Shunt Capacitance - No greater than 18 pF.

Radio Frequency Range - 2 - 36 MHz.

Radio Frequency Current - 10.0 amperes rms maximum at 2 MHz.

Lightning Stroke - Per MIL-A-9094 the lightning arrester shall effecively bypass the full charge for each of 12 lightning strokes.

Environmental:

The arresters shall be capable of meeting the requirements of this specification subsequent to subjection to the following environmental tests.

Sand and Dust - The arresters shall be subjected to sand and dust tests in accordance with MIL-STD-202, Method 110, Test Condition A.

Salt Spray - The arresters shall be subjected to salt spray tests in accordance with MIL-STD-202, Method 101, Test Condition B utilizing a 5 percent salt solution.

Vibration - The arresters shall be subjected to vibration tests in accordance with MIL-STD-202, Test Method 204, Test Condition A.

Thermal Shock - The arresters shall be subjected to thermal shock tests in accordance with MIL-STD-202, Test Method 107, Test Condition A except Step 3 shall be +71 ± 3° C. No physical damage shall result from this test.

Shock (specified pulse) - The arresters shall be subjected to shock tests in accordance with MIL-STD-202, Method 213, Test Condition G, for a total of 18 shocks.

Seal - The arresters shall be subjected to seal tests in accordance with MIL-STD-202, Method 112, Test Condition C, Procedure 1.

Humidity - The arresters shall be subjected to humidity tests in accordance with MIL-STD-202, Method 103, Test Condition A.

Resistance to Solvents - The arresters shall be subjected to resistance to solvents tests in accordance with MIL-STD-202, Method 215. No deterioration of markings or finishers or electrical or mechanical damage is permissible.

Barometric Pressure (reduced altitude) - The arresters shall be tested in accordance with MIL-STD-202, Method 105, Test Condition A. No physical damage shall result.

General Note - Under all of the Environmental Tests, if there are any exceptions to the test called out in MIL-STD-202, they shall be listed following the requirement. This specification is for procurements only of existing design, which has not been updated. Not recommended for new design or application.

Part No. M9094/2-001

Cross Reference Data (A)

MIL Part No	FSCM (74999)	FSCM (91637)
M9094/2-001	P/N AD969DWA	P/N AMC-127

Custodians:
Air Force - 85
Navy - AS
Army - EL

Review Activity:
Air Force - 11, 80

Preparing Activity:
Air Force - 85

(Project No. 5920-0353-02)

STANDARDIZATION DOCUMENT IMPROVEMENT PROPOSAL

OMB Approval No. 22-R255

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DOCUMENT IDENTIFIER AND TITLE

MIL-A-9094/2A Arrester, Lightning (Aircraft)

NAME OF ORGANIZATION AND ADDRESS	CONTRACT NUMBER
	MATERIAL PROCURED UNDER A ☐ DIRECT GOVERNMENT CONTRACT ☐ SUBCONTRACT

1. HAS ANY PART OF THE DOCUMENT CREATED PROBLEMS OR REQUIRED INTERPRETATION IN PROCUREMENT USE?

   A. GIVE PARAGRAPH NUMBER AND WORDING.

   B. RECOMMENDATIONS FOR CORRECTING THE DEFICIENCIES

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3. IS THE DOCUMENT RESTRICTIVE?

   ☐ YES ☐ NO *(If "Yes", in what way?)*

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